

### **3.11 Natural Groundwater Aquifer Recharge**

#### **GOAL 1101**

Monroe County shall protect the quality and quantity of water in the potable water aquifer and in the freshwater lens systems so as to ensure public health, conserve the public water supply, and preserve ecosystems dependent upon freshwater. [9J-5.011(2)a]

#### **Objective 1101.1**

Monroe County shall work cooperatively with Dade County to encourage land use planning and development controls which shall protect the recharge area of the Florida City Wellfield from potential sources of groundwater contamination. (See Potable Water Objective 701.4 and related policies.) [9J-5.011(2)(b)5]

#### **Objective 1101.2**

By January 4, 1998, Monroe County shall map the freshwater lens systems and associated recharge areas in the Florida Keys and shall adopt regulations which protect the lenses from loss of recharge potential and from threats of groundwater contamination. [9J-5.011(2)(b)5; 9J-5.013(2)(b)2]

#### **Policy 1101.2.1**

By January 4, 1997, Monroe County shall adopt a Stormwater Management Ordinance. This ordinance shall establish level of service standards for the quality and quantity of stormwater discharges. The ordinance shall encourage use of site-specific natural drainage features to the maximum extent possible before utilizing structural stormwater control. The protection of freshwater lens recharge areas, and associated freshwater wetlands where identified, shall be of primary concern in design of a development project. [9J-5.011(2)(c)4; 9J-5.013(2)(b)1 and 9]

#### **Policy 1101.2.2**

Monroe County shall undertake activities which shall reduce pollutant entry into groundwater, summarized as follows:

1. Monroe County shall develop and implement permitting, inspection and enforcement procedures designed to reduce pollutant discharges into groundwater from:
  - a) on-site disposal systems (see Sanitary Sewer Goal 901 and related objectives and policies);
  - b) secondary sewage treatment plants and injection wells (see Sanitary Sewer Goal 901 and related objectives and policies); and
  - c) stormwater runoff (see Drainage Element Objective 1001.3 and related policies);

- d) Monroe County shall immediately take actions to promote mosquito control techniques which will reduce the entry of pollutants from aerial pesticide applications into groundwater (see Conservation and Coastal Management Objective 202.11 and related policies);
- e) Monroe County HRS Unit shall continue to undertake activities designed to reduce pollutant discharges into ground and surface waters from aboveground and underground fuel storage tanks (see Conservation and Coastal Management Objective 202.12 and related policies); and
- f) Monroe County shall undertake activities which support existing state and federal laws pertaining to the handling, transportation and disposal of hazardous wastes (see Solid Waste Objective 801.5 and related policies.) [9J-5.011(2)(c)4; 9J-5.012(3)(b)2; 9J-5.013(2)(b)1,2,9 and 10]

#### **Policy 1101.2.3**

By January 4, 1997, Monroe County shall initiate an interlocal agreement with the USFWS and SFWMD to map and evaluate the freshwater lenses of the Florida Keys and their associated recharge areas. Previously conducted studies by the National Audubon Society Research Department, Southern Illinois University, and the SFWMD will be utilized to the greatest extent possible. An analysis of the condition of the lenses shall also be completed.

Mapped data shall be entered into the County's Geographic Information System. [9J-5.011(2)(c)4; 9J-5.013(2)(b)1 and 9]

#### **Policy 1101.2.4**

Pending completion of the freshwater lens study, Monroe County shall continue to restrict the percentage of impervious surfaces on development sites through application of the Open Space Requirements in the Land Development Regulations. These regulations shall be met or exceeded in order to minimize impervious areas and to protect freshwater lens recharge areas. [9J-5.011(2)(c)4; 9J-5.013(2)(b)1 and 9]

#### **Policy 1101.2.5**

Upon completion of the freshwater lens and recharge area mapping and evaluation, the County shall consider altering the open space ratios, and other development regulations to protect the quantity and quality of groundwater in the freshwater lens systems. The County shall also assign a negative point rating in the Point System for developments proposed in freshwater lens recharge areas. [9J-5.011(2)(c)4; 9J-5.012(3)(b)2; 9J-5.013(2)(b)1,2,9 and 10]

### **Objective 1101.3**

By the year 2000, the use of well water in the Florida Keys for public consumption and commercial use shall be phased out in order to ensure the health and safety of the public and to ensure the preservation of the existing freshwater lens system. [9J-5.011(2)(b)5; 9J-5.013(2)(b)2]

#### **Policy 1101.3.1**

By January 4, 1997, Monroe County shall adopt Land Development Regulations which prohibit new wells for drawing water from the freshwater lens systems for private residential and private commercial purposes in the Florida Keys. Exceptions shall be allowed for wells for approved periodic water testing. [9J-5.011(2)(c)4; 9J-5.013(2)(b)1 and 9)

**Policy 1101.3.2**

By January 4, 1998, in conjunction with the development of the Sanitary Wastewater Master Plan, Monroe County shall identify existing wells used for drawing water for private residential and private commercial purposes. [9J-5.011(2)(c)4; 9J-5.013(2)(b)1 and 9]

**Policy 1101.3.3**

The use of existing wells shall be phased out in accordance with the availability of adequate, affordable, alternative potable water sources.

